

PREFACE

In keeping with our mission of conducting scientific research and applying science for the benefit of the community, we at Tuberculosis Research Centre (TRC), have continued to make significant contributions in clinical, operational, applied and basic research. At TRC, we value the contributions made by our scientific and research staff and are aware of our responsibility towards the patients approaching our clinical facility. In order to ensure that we remain effective and to help us serve our patients better, various infrastructure-strengthening activities are currently in progress. This includes the construction of a “state of the art” patient care and clinical research facility.

Recently, the outstanding field research by the staff of the Epidemiology Division of TRC, presented the evidence that implementation of the Directly Observed Treatment Short-course (DOTS) strategy is associated with a rapid reduction in tuberculosis prevalence. This is in contrast to the gradual decline in TB prevalence over the preceding 30 years reported earlier by TRC. These observations emphasize the necessity for sustaining quality DOTS in the coming years by all sectors of the government, as well as non-governmental agencies if India wants to achieve the millennium development target of 50% reduction in TB prevalence by 2015.

Last year, a notable landmark was achieved with the establishment of an International Centre for Excellence in Research (ICER) in collaboration with the National Institutes of Health (NIH), USA. Up gradation of research facilities that include immunology and molecular biology laboratories as well as a BSL-3 facility are under way and are expected to be ready by the end of 2005.

The major new initiative during the reporting period has been the establishment of the HIV Vaccine Trial site. In October 2004, preparation for a randomized, placebo-controlled, dose-escalating phase I double-blinded study to evaluate the safety and immunogenicity of TBC-M4 [Modified Vaccinia Ankara (MVA) HIV-1 multigenic subtype C] vaccine in HIV-uninfected, healthy volunteers was initiated. This is a trial overseen by the Government of India, and is being conducted as a collaborative effort between the Indian Council of Medical Research (ICMR) and National AIDS Control Organization (NACO), in partnership with the not-for-profit International AIDS Vaccine Initiative (IAVI). The trial will be carried out by TRC, with collaboration from YRG Care, Chennai, Tamil Nadu State AIDS Control Society (TNSACS) and the Government of Tamil Nadu. During the period under review, renovation of the trial site has been completed to accommodate a state-of-the-art Vaccine Trial Centre (VTC).

The HIV/AIDS division will shortly initiate a randomized controlled clinical trial for TB-HIV patients, which will combine anti-retroviral therapy (ART) and anti-TB therapy in order to reduce mortality and improve TB treatment outcomes. The trial will test two different once-daily anti-retroviral regimens as well as the feasibility of providing ART by DOT. The trial has been funded by the NACO and will provide information that will be useful to both the National TB and AIDS control programmes.

The clinical trial on the efficacy and tolerability of the newer fluoroquinolones, moxifloxacin and gatifloxacin containing regimens in the treatment of patients with sputum positive pulmonary tuberculosis is continuing. The other two major trials that were initiated three years ago on the efficacy of RNTCP regimens in HIV-infected persons as well as chemoprophylaxis for TB among HIV positive individuals are also continuing. Patient intake has been completed and follow-up is in progress.

TRC continued its support for the TB Control programme of the Govt. of India by providing RNTCP training, carrying out disease and Annual Risk of Infection (ARI) surveys as well as drug resistance surveillance and establishing External Quality Assurance (EQA) of smear microscopy, for laboratories around the country.

TRC continues to offer plentiful opportunities for motivated and innovative minds to pursue research in various disciplines of life science including microbiology, biochemistry, biostatistics, immunology, molecular and cellular biology. A perfect blend of extremely focused faculty together with the high-tech laboratory facilities offered at this Centre provides the ideal ambience to foster a true spirit of enquiry and scientific acumen in young minds. Students are encouraged to participate in paper presentations and scientific debates to ensure interdisciplinary exchange of thoughts and to hone their communication skills. Currently, 26 brilliant and dexterous youngsters are pursuing their Ph. D. programme at TRC.

The pages to follow will elaborate on the major research and service activities undertaken by the Centre for the reporting time period.

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